

THAT WHICH IS CLAIMED:

1. An interface circuit for supplying a computer logic circuit with first and second inputs having first and second predetermined voltage levels, respectively, the interface circuit comprising:

- 5 a first power supply circuit for providing the first input having the first predetermined voltage level in response to a first supply voltage;
- a regulator for generating an output having the second predetermined voltage level in response to the first supply voltage; and
- 10 a second power supply circuit for providing an output having the second predetermined voltage level in response to a second supply voltage,
- wherein said regulator and said second power supply circuit cooperate to provide the second input having the second predetermined voltage level in instances in which the second supply voltage is present, and
- wherein said regulator supplies provides the second input having the second
- 15 predetermined voltage level in a manner independent of said second power supply circuit in instances in which the second supply voltage is unavailable.

2. An interface circuit according to Claim 1 wherein said regulator provides the second input having the second predetermined voltage level in instances in which the

20 second supply voltage is unavailable.

3. An interface circuit according to Claim 1 wherein the second input has first and second portions with different tolerances, and wherein said regulator is capable of supplying the first portion of the second input and said second power supply circuit is

25 capable of supplying the second portion of the second input.

4. An interface circuit according to Claim 3 wherein said second power supply circuit comprises a power switching circuit for providing the output of said second power supply circuit as the second portion of the second input to the computer logic

30 circuit in instances in which the second supply voltage is present and for providing the

output of said regulator as the second portion of the second input to the computer logic circuit in instances in which the second supply voltage is unavailable.

5        5.        An interface circuit according to Claim 4 wherein said second power supply circuit further comprises a voltage detection circuit for determining if the second supply voltage is present and for correspondingly notifying said power switching circuit.

10       6.        An interface circuit according to Claim 1 wherein said second power supply circuit comprises an isolation circuit for permitting the second supply voltage to be provided to the computer logic circuit without permitting the computer logic circuit to drive the second supply voltage.

15       7.        An interface circuit according to Claim 1 wherein the interface circuit and the computer logic circuit are mounted upon an adapter card that is capable of being plugged into an adapter slot to thereby establish electrical contact with at least a first power rail providing the first supply voltage.

20       8.        An interface circuit for supplying a computer logic circuit with an input having first and second portions that are each at the same predetermined voltage level, the interface circuit comprising:

        a regulator for generating an output having the predetermined voltage level in response to a first supply voltage, said regulator providing the output as the first portion of the input to the computer logic circuit; and

25       a power supply circuit capable of providing an output having the predetermined voltage level in response to a second supply voltage, wherein said second power supply circuit comprises a power switching circuit for providing the output of said power supply circuit as the second portion of the input to the computer logic circuit in instances in which the second supply voltage is present and for providing the output of said regulator as the second portion of the input to the computer logic circuit in instances in which the  
30       second supply voltage is unavailable.

9. An interface circuit according to Claim 8 wherein the output provided by said regulator has a smaller tolerance than the output provided by said power supply circuit.

5 10. An interface circuit according to Claim 8 wherein said second power supply circuit further comprises a voltage detection circuit for determining if the second supply voltage is present and for correspondingly notifying said power switching circuit.

10 11. An interface circuit according to Claim 8 wherein said second power supply circuit further comprises an isolation circuit for permitting the second supply voltage to be provided to the computer logic circuit without permitting the computer logic circuit to drive the second supply voltage.

15 12. An interface circuit according to Claim 8 further comprising another power supply circuit for providing the computer logic circuit with an additional input having a different predetermined voltage level in response to the first supply voltage.

20 13. An interface circuit according to Claim 8 wherein the interface circuit and the computer logic circuit are mounted upon an adapter card that is capable of being plugged into an adapter slot to thereby establish electrical contact with at least a first power rail providing the first supply voltage.

25 14. A method for supplying a computer logic circuit with first and second inputs having first and second predetermined voltage levels, respectively, the method comprising:

providing the computer logic circuit with the first input having the first predetermined voltage level based upon a first supply voltage;

determining if a second supply voltage is present; and

30 providing the computer logic circuit with the second input having the second predetermined voltage level, wherein providing the second input comprises providing the second input having the second predetermined voltage level based upon both the first and

second supply voltages if the second supply voltage is present, and wherein providing the second input comprises providing the second input having the second predetermined voltage level based only upon the first supply voltage if the second supply voltage is unavailable.

5

15. A method according to Claim 14 wherein providing the computer logic circuit with the second input in instances in which the second supply voltage is present comprises:

10 providing a first portion of the second input with a first tolerance based upon the first supply voltage; and

providing a second portion of the second input with a second tolerance based upon the second supply voltage.

16. A method according to Claim 15 wherein the second portion of the second input is provided with a looser tolerance than the first portion of the second input.

17. A method according to Claim 14 further comprising isolating the second supply voltage and the computer logic circuit by permitting the second supply voltage to be provided to the computer logic circuit without permitting the computer logic circuit to drive the second supply voltage.

20